

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A process for manufacture of long circulating non-pegylated liposomes comprising:

dissolving one or more phospholipids and one or more sterols in a solvent or mixture of solvents;

~~forming a lipid film by evaporating a solvent from a lipid solution comprising one or more phospholipids, a sterol and a solvent; and~~

hydrating the phospholipids and sterols[[film]] with an aqueous hydration media ~~to form non-pegylated liposomes;~~

removing the solvent or mixture of solvents before or after hydrating the lipids;

wherein the amount of aqueous hydration media used is in the range of 10 to 35 ml for each mmole of phospholipid present ~~in the lipid solution~~ to form non-pegylated liposomes; and

wherein the aqueous hydration media comprises ammonium sulfate and sucrose; and

wherein the one or more phospholipids is a saturated phosphatidylcholine selected from the group consisting of distearoyl phosphatidylcholine (DSPC), dipalmitoyl phosphatidylcholine (DPPC), hydrogenated soya phosphatidylcholine (HSPC) and derivatives thereof; and

wherein the one or more phospholipids exhibits a phase transition temperature of between 50 and 65°C; and

wherein the non-pegylated liposomes have a blood circulation half life of at least 25 times longer than conventional non-liposomal formulations when tested in Swiss albino mice at equivalent doses.

~~wherein the forming and the hydrating are performed without the addition of polyethylene glycol (PEG).~~

2. (Original) The process of claim 1 wherein the amount of aqueous hydration media used is 30 ml for each mmole of phospholipid in the lipid solution.

3. (Original) The process of manufacture of non-pegylated liposomes of claim 1 further

comprising loading the liposomes with a therapeutic or diagnostic agent.

4. (Original) The process of claim 3, wherein the therapeutic agent is an antineoplastic agent.
5. (Original) The process of claim 4, wherein the antineoplastic agent is selected from the group consisting of Doxorubicin hydrochloride, Daunorubicin hydrochloride, and Epirubicin hydrochloride.
6. (Original) The process of claim 5, wherein the antineoplastic agent is Doxorubicin hydrochloride.
7. (Original) The process of claim 1, wherein the molar ratio of phospholipid to sterol is from about 1:0.1-1:2.
8. (Previously Presented) The process of claim 7, wherein the molar ratio of phospholipid to sterol is from about 1:0.7.
9. (Previously Canceled).
10. (Previously Presented) The process of claim 1, wherein the concentration of ammonium sulfate in aqueous hydration media is not less than 125 mmoles/liter.
11. (Currently Canceled).
12. (Currently Amended) The process of claim ~~[[11]]~~ 1, wherein the phospholipid has a minimum of sixteen carbons fatty acid chain.
13. (Currently Canceled).

14. (Currently Amended) The process of claim ~~[[13]]~~1, wherein the phospholipid is distearoyl phosphatidylcholine (DSPC) and wherein the sterol is cholesterol.
15. (Original) The process of claim 1, wherein the non-pegylated liposomes are successively extruded through series of filters having pore sizes from 0.4 μm to 0.05 μm for sizing.
16. (Original) A liposome manufactured by the process of claim 1.
17. (Original) The liposome of claim 16, wherein the phospholipid comprises distearoyl phosphatidylcholine (DSPC) and the sterol comprises cholesterol.
18. (Original) The liposome of claim 16, wherein the non-pegylated liposome further comprises a therapeutic or diagnostic agent.
19. (Original) The liposome of claim 18, wherein said therapeutic agent comprises an antineoplastic agent.
20. (Original) The liposome of claim 19, wherein the antineoplastic agent is selected from the group consisting of Doxorubicin hydrochloride, Daunorubicin hydrochloride, and Epirubicin hydrochloride.
21. (Original) The liposome of claim 20, wherein the antineoplastic agent is Doxorubicin hydrochloride.
22. (Original) The liposome of claim 16, wherein the average size of liposome is 0.06 μm to 0.16 μm in diameter.
- 23.-60. (Previously Canceled).

61. (Currently Canceled).

62. (Currently Amended) The process of claim 1, further comprising ~~removing the solvent before after hydrating the lipid film; wherein the amount of the aqueous hydration media used is in the range of 10 to 35 ml for each mmole of phospholipid present in the lipid solution;~~ sizing the non-pegylated liposomes to about 0.06 μm to form a liposomal composition; removing extra-liposomal hydration salt from the liposomal composition using a sucrose-histidine buffer solution to form non-pegylated ~~[[size]]~~sized liposomes.